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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,454	07/21/2003	Steven M. Casey	020366-089500US	5591
20350 7590 01/07/2009 TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834				
EXAMINER				
NGUYEN, VAN KIM T				
ART UNIT		PAPER NUMBER		
2456				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/624,454

**Applicant(s)**

CASEY ET AL.

**Examiner**

Van Kim T. Nguyen

**Art Unit**

2456

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 October 2008.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-46 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-46 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date October 3, 2008  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This Office Action is responsive to communications filed on October 24, 2008.

Claims 1-46 are pending in the application.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on October 3, 2008 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-46 have been considered but are moot in view of the new grounds of rejection.

### ***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-8, 12, 17, 21-25, 27, 32, 35-37, 39 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore, Jr. et al, hereinafter Moore (US 7,035,270), in view of Bhogal et al, hereinafter Bhogal (US 7,248,563), and further in view of Chrabaszcz (US 6,212,585).

Regarding claims 1, 22 and 35, Moore discloses a network interface device (30) comprising:

an isolation device adapted to isolate a transport medium internal to a customer premises from a transport medium external to the customer premises such that operational changes to one of the internal and external transport media do not affect the other of the internal and external transport media (e.g., home network interface 32 containing appropriate physical layers and interface, e.g., antenna, RJ-11 connection, power system connection that operational changes to the internal and external transport media do not affect the other of the internal and external transport media; col. 3: lines 44-47);

a first interface coupled with the isolation device and adapted to communicate with the external transport medium, wherein the external transport medium is in communication with a distribution point (interface 38, 42, 62; col. 3: lines 53-67);

a second interface coupled with the isolation device and adapted to communicate with the internal transport medium (main bus 34; col. 3: lines 44-47); and

a plurality of microservers disposed external to the customer premises and coupled with the first and second interfaces, wherein the plurality of microservers are adapted to receive telecommunication information from the external transport medium and includes software and hardware for implementing at least one of an authentication microserver, a file-transfer microserver, a dynamic host configuration protocol microserver, or a webserver microserver to function over the internal transport medium by processing the received telecommunication information (HNG 30 and dogle 58 controls access to MSO-based services which includes audio/video entertainment and Internet access and obtains NMS/EMS authorization and authentication information to allow subscribers access to web services, inherently by implementing at least a webserver or an authentication server; Figure 3, col. 4: lines 18-29, and

col. 5: lines 36 –col. 6: line 24), wherein the plurality of microservers are plug-and-play combatable and integrated in the network interface device (col. 3: lines 37-52 and col. 4: lines 44-47)

Moore does not explicitly call for the isolation device adapted to provide communications security by preventing a microserver from accessing communications information which is associated with another microserver.

Bhogal teaches the isolation device adapted to provide communications security by preventing a microserver from accessing communications information which is associated with another microserver (e.g., blocking a specified computer from accessing the network; col. 3: lines 15-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Bhogal's method of restricting access to a network in Moore's system, motivated by the need to strengthen network security.

Moore-Bhogal discloses substantially all the claimed limitations, except the plurality of microservers are configured to be able to be added and/or removed from the network interface device at any time and without configuration.

Chrabaszcz teaches the plurality of microservers are configured to be able to be added and/or removed from the network interface device at any time and without configuration (hot adding and/or replacing a device in a server and without configuration; col. 6: lines 24-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Chrabaszcz' teaching of hot adding a device in Moore-Bhogal's system,

motivated by the need to reduce downtime due to system failures and maintenance in order to provide quality performance and product reliability to users of the computer systems.

Regarding claim 2, Moore-Bhogal-Chrabaszcz also discloses the isolation device and the plurality of microservers are disposed within a common housing (Moore; Figure 2).

Regarding claim 3, Moore-Bhogal-Chrabaszcz also discloses the common housing (30) is disposed on an exterior wall of the customer premises (Moore; Figure 3).

Regarding claims 4 and 23, Moore-Bhogal-Chrabaszcz also discloses an addressable application device coupled with the plurality of microservers, wherein the addressable application device is adapted to receive the processed telecommunication information and to execute a defined application as an aid to implementing the microserver functions over the internal transport medium (DSP 50 emulates PCM highway to communicate with SLIC 36 and in-home network interface 32 to distribute telephone signals and other signals throughout the home network; Moore, col. 4: lines 13-25).

Regarding claim 5, Moore-Bhogal-Chrabaszcz also discloses the addressable application device is disposed external to the customer premises (Moore, Figure 3).

Regarding claim 6, Moore-Bhogal-Chrabaszcz also discloses the isolation device, the plurality of microservers, and addressable application device are disposed within a common housing (Moore, Figure 2).

Regarding claims 7, 24 and 36, Moore-Bhogal-Chrabaszcz also discloses the authentication microserver is adapted to verify that the microserver functions are authorized for the customer premises (Moore, col. 6: lines 1-6).

Regarding claims 8, 25 and 37, Moore-Bhogal-Chrabaszcz also discloses the file-transfer microserver is adapted to transfer an electronic file of information to or from the network interface device (retrieve configuration files and upload the files to a specific device for configuration or other purposes; Moore, col. 5: lines 64-67).

Regarding claims 12, 27 and 39, Moore-Bhogal-Chrabaszcz also discloses the plurality of microservers comprise a code-processing microserver adapted to receive code and process the code for use by another component of the network interface device (conversion functionality needed to convert digital signal from DSP 50 into analog telephone is implemented in dongle 58; Moore, col. 4: lines 21-40).

Regarding claims 17, 32 and 44, Moore-Bhogal-Chrabaszcz also discloses the plurality of microservers comprise a wireless microserver adapted to provide an interface between wireless

communications within the customer premises to the external transport medium (RF connector 44 or antenna 62; Moore, Figure 2).

Regarding claim 21, Moore-Bhogal-Chrabaszcz also discloses upgradeable firmware that supports the plurality of microservers (home network interface 32 can be in the form of a plug-in card connected to main bus 34; Moore, col. 3: lines 44-47. Thus, if new and improved interface card is available, the system can be upgraded).

6. Claims 9-11, 13-16, 18-20, 26, 28, 30, 33-34, 38, 40, 42 and 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore-Bhogal-Chrabaszcz as applied to claim 1 above, in view of Rakib (US 6,970,127).

Regarding claims 9-11, 26 and 38, Moore-Bhogal-Chrabaszcz discloses substantially all the claimed limitations, except a dynamic host configuration protocol microserver adapted to manage an internet-protocol address assignment to a device coupled with the internal transport medium.

As shown in Figure 8, Rakib teaches a home gateway comprising a DHCP server 320 assigns addresses to clients on the LAN and in the gateway (col. 27: lines 16-17; Figure 8). Obviously, internet-protocol address assignment can either be public or private address assignment.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Rakib's method of using a DHCP server in Moore-Bhogal-Chrabaszcz' system in order to access, control and monitor the gateway remotely.



Regarding claims 13, 28 and 40, Moore-Bhogal-Chrabaszcz-Rakib also teaches the webserver microserver adapted to render a display of incoming web page information suitable for presentation with a web-browser enabled device (a web server application 340 controls host computer 308 to serve web pages to browsers on the internet (Rabik; col. 31: lines 8-10).

Regarding claims 15, 30 and 42, Moore-Bhogal-Chrabaszcz-Rakib also teaches the plurality of microservers comprise an instant-messenger microserver adapted to provide instant-messaging functionality over the internal transport medium (Rabik; col. 23: lines 13-17).

Regarding claim 16, Moore-Bhogal-Chrabaszcz-Rakib also teaches the plurality of microservers comprise:

a webserver microserver adapted to render a display of web-page information suitable for presentation with a web-browser enabled device (Rabik; col. 31: lines 25-38); and

an advertising microserver adapted to overlay an advertisement over the display of web-page information (Rabik; col. 22: lines 63-67)

Regarding claims 18, 33 and 45, Moore-Bhogal-Chrabaszcz-Rakib also teaches the plurality of microservers comprises an RF power-level microserver adapted to monitor an RF power level of telecommunication information received at the first interface (e.g., rate shaping circuitry 11 to change the data rate of data transmitted to or received from headend 12 over transmission medium 12; Rabik; col. 6: lines 33-60).

Regarding claim 19, Moore-Bhogal-Chrabaszcz-Rakib also teaches the plurality of microservers comprise a test-access microserver adapted to verify proper functioning of another component of the network interface device (gateway 12 has intelligent hub management software that monitors traffic conditions and does whatever management and rate shaping is necessary to most efficiently use the LAN resources 28 and broadband 14 that are available; Rabik; col. 7: lines 63-67).

Regarding claims 20, 34 and 46, Moore-Bhogal-Chrabaszcz-Rakib also teaches a webserver microserver coupled with the plurality of microservers and adapted to provide a customer-based graphical user interface for implementing software configuration changes of the microserver (Moore-Bhogal; col. 5: lines 60-67 and Rabik; col. 31: lines 25-38).

7. Claims 14, 29 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moore-Bhogal-Chrabaszcz as applied to claim 1 above, in view of Johnson et al (US 5,694,616).

Regarding claim 14, Moore-Bhogal-Chrabaszcz discloses substantially all the claimed limitations, except initiating an email alert in response to receipt of an email at an email account.

Johnson et al teaches initiating an alert in response to receipt of an email message at an email account (col. 3: lines 16-18).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Johnson's method of notifying the receiving of email in Moore-Bhogal-

Chrabaszcz' system in order to provide receivers with a friendly user email product that alerts users with receiving messages.

### ***Conclusion***

8. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Van Kim T. Nguyen whose telephone number is 571-272-3073. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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